DOCUMENT RESUME

ED 247 508 CG 017 670

AUTHOR Kaplan, Martin F.
TITLE Modifying Moral Reasoning.
PUB DATE Jun 84
NOTE 14p.; Paper presented at the Conference on Justice and Law (Nags Head, NC, June 10-15, 1984).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Developmental Stages; High School Freshmen; High Schools; *Moral Development; *Moral Values; Outcomes of Education; Research Methodology; Value Judgment
IDENTIFIERS *Information Integration Theory; *Moral Reasoning

ABSTRACT

The application of Information Integration Theory (Anderson, 1981), a general model of social judgment, overcomes shortcomings in the evaluation of moral development by offering a clear distinction between moral values and reasoning. To test the applicability of Anderson's theory to moral development research, two experiments were conducted using high school freshmen who were given eight written standard moral dilemmas to respond to. In experiment 1, students who had just completed a moral decision making training program (N=64) were compared to controls (N=64). In experiment 2, students (N=32) were subjected to a cognitive reasoning training program designed to increase use of relativistic weighting with nonmoral social judgment tasks. The effect of training on moral reasoning was determined for these students, as compared to a control group (N=32) that had not had the training program. In experiment 1, trained students responded more strongly toward the moralistic choice and showed less configuration or relativity in considering rationales than nontrained students. Trained subjects were not more influenced by postconventional rationales and were not less influenced by conventional or preconventional rationales. In experiment 2, trained subjects weighted the cost of helping more after discussions than before. There was no tendency for trained subjects to choose more moral alternatives. In general the information integration approach provided a powerful means of separating reasoning from values. (JAC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED247508

MODIFYING MORAL REASONING

Martin F. Kaplan
Northern Illinois University

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☒ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Martin F. Kaplan

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CG 017670

Paper presented at the Conference on Justice and Law, Nags Head, NC, June 10-15, 1984.

MODIFYING MORAL REASONING

Martin F. Kaplan
Northern Illinois University

Social development is characterized by stage conceptions, in which the individual progresses through a hierarchical series of stages, ordered in a lawful fashion. Moral judgment is a prime example; people progress at varying rates through a prescribed sequence of stages until some (but not all) reach the theoretically highest stage (Kohlberg, 1976; Piaget, 1965). Importantly, the progression is described as lying in the reasoning behind moral behavior and not in the moral value of the behavior per se.

Several paradigms have arisen in the study of moral reasoning; one of the most invoked involves assessing the reasoning leading to choices among alternative actions, each with moral implications [the "choice dilemma" (Kohlberg, 1976)]. Typically, the respondant is given a hypothetical situation and must choose between two given actions for the main character, each having positive moral values or rationales. For example, Heinz's wife is dying, and a drug which could save her is beyond his financial reach. Should he steal it or not? Moral reasoning stage is indexed not by the choice of action, but by the reasons given for any choice from a list provided with the dilemma, that is, moral reasoning stage refers to the rationales with most effective power. Piaget described three hierarchical stages in reasoning. Preconventional reasoning emphasizes external rewards and punishments as rationales for actions, Conventional reasoning centers on acceptance of rules and expectations of significant others in society, and finally, Postconventional reasoning is based on internalized principles of ethical behavior, or abstract conceptions of justice. Kohlberg (1976) later elaborated the model to include six levels, but contained within the original three stage structure.

In addition to developmental shifts through the stages of rationale dependence, a second progression is suggested by Piaget's work in moral reasoning: Complexity of cognitive processes. People progress from an absolute consideration of components ("moral realism" or "heteronomous reality") where any component of the choice is unchanging in its centrality or importance, to more relativistic reasoning ("autonomous reality"), where the value or importance of an element depends on the configuration of other elements. For example, in the former type of reasoning, peer approval would have the same effect on choice of an action whether or not the actor is likely to be caught and punished, while in the latter form, the extent to which approval influences choice depends on whether punishment or reward will occur, whether an ethical principle will be served, and so on. While Kohlberg does not explicitly consider this complexity progression, his highest stage requires acting solely on the basis of absolute principles of justice, regardless of other factors -- an apparent reversal of Piaget's theoretical progression.

Evaluation of developmental theorizing has been limited by a number of shortcomings, which have been discussed elsewhere (e.g., Kurtines & Greif, 1974). We will focus on two crucial problems, one methodological, the other conceptual. First, in both interview (Kohlberg, 1976) and paper-pencil

(Rest, 1975) measurements of moral dilemma reasoning, subjects are asked to order potential rationales after giving their action choices in the scenario, responding to a "shopping list" of rationales which reflect the range of pre- to post-conventional considerations for each alternative. Undue trust is placed on retrospective reports of considerations which influenced the completed choice. Such retrospective accounts may be innacurate due to social desirability pressures, rationalization, and so on. Moreover, there is accumulating evidence (e.g., Nisbett & Wilson, 1977) that people do not always know the cues and reasons for their social judgments. Rather than naive reliance on subject reconstruction of their reasoning processes, it is preferable (and common practice in the social psychology of judgment) to observe the judgments made when different rationales are present or absent in a situation, and to infer relative importance of reasoning elements from the strength and pattern of choices under different conditions. For example, if we wish to know the relative importance of guiding principles versus punishment, we should covary the likelihood of both in the scenario and observe the patterns of action choice.

The second problem strikes at the heart of the developmental conception. While developmentalists distinguish between moral values ("stealing is bad") and reasoning, with developmental progression tied to the latter, the distinction becomes blurred in practice, largely because clear operationalizations of the two are lacking. Evidence shows a link, for example, between particular choices (e.g., "Heinz should steal the drug") and rationales selected (i.e., some choices are associated with higher level rationales -- Martin, Shafto, & Vandeinse, 1977).

A clearer distinction between moral values and reasoning, both conceptually and operationally, is obtainable by application of Information Integration Theory (Anderson, 1981), a general model of social judgment. Here the distinction between values and reasoning is integral to the theory and its application. Judgment is based on information about the judged object (an action in this instance). Each piece of information has two qualities which can be expressed in quantitative, subjective terms. Scale value refers to its value for the dimension of judgment. The prospect of being rewarded has a higher scale value on the dimension "Should (not) steal the drug" than does the prospect of receiving peer disapproval. Each piece also has a weight, which gives its subjective importance for that judgment. For person X, peer disapproval (low scale value) may carry greater weight in determining the choice than reward (high scale value). The weighted values are then integrated into a unitary judgment ("How strongly do I feel that the drug should (should not) be stolen?") by means of an algebraic rule, which could vary in its complexity. One could, for example, simply add together the values of the pros and cons for an action, or one could engage in relative weighting whereby the weighted values are averaged and each weight depends on the value and kind of other known information. In this formulation, moral value (the goodness/badness of each piece of information and of the target act as well) is clearly distinct from reasoning. The latter resides in the weight assigned to each piece of information, and in the cognitive integration rule that is employed in combining the values. Two expectations are immediately apparent. First, persons functioning at a higher moral level should give more weight to postconventional considerations, and less to preconventional, compared to persons at lower levels. Second, the former persons should show a more relativistic integration strategy, where the weight of any one component depends on the value of other components, compared to the latter persons.

Two experiments are reported here. In both subjects were given standard moral dilemmas, but with an important modification: Rather than being asked to reconstruct their reasoning, they were provided in each scenario with likelihoods that high or low valued rationales of preconventional, conventional, and postconventional type would be present (e.g., "There is a high (low) likelihood that Heinz would be caught and punished"). Through covariation of rationale type and their values, it is possible to determine by statistical and graphical analysis of scaled choices the weights given each rationale, and the integration pattern for different subject groups. In Experiment 1, high school students having just completed a moral education program designed to "upgrade" reasoning were compared to controls. In Experiment 2, high school students were subjected (or not) to a training program designed to increase use of relativistic weighting with nonmoral social judgment tasks, and the effect of training on moral reasoning was determined.

EXPERIMENT 1

Method

Moral Reasoning Task. Eight moral dilemmas were obtained from the scenarios used in the Defining Issues Test (Rest, 1975) and in standard interviews (Kohlberg, 1976)[1]. In pretesting, it was found that definite preferences existed for one over the other of the two alternative actions in each scenario, for example, college students in an earlier test preferred that Heinz steal the drug rather than let his wife die. On 20 point scale where "20" represented one choice and "1" the other, the degree of preference for a given choice ranged from 12.55-14.47 (Mean= 13.33); note that an equal preference of choices would incur a mean rating of ten. Preference tendencies were taken into account in construction of the final scenarios and in their presentation (see below).

With the help of an educational consultant, scenarios were slightly revised to accommodate a 6th grade reading level. For each scenario, eight modifications were devised, varying the likelihood that a preconventional (Pr), conventional (Co), or postconventional (Po) outcome would ensue if one of the actions would be chosen. In any scenario, there was reported either a high or low chance that each type of outcome or rationale would take place. These considerations were worded so that in half the scenarios a high chance of occurance would argue for the less normatively preferred action, and in the remaining half, a high chance would favor the more normatively preferred action. For example, "There is a high chance that the authorities will discover who Thompson really is and Mrs. Jones would be prosecuted for withholding information" gives a high likelihood of a preconventional outcome favoring reporting an escaped prisoner -- the less normatively preferred action. "There is a high chance that giving food on credit would teach others that the well-being of people is important for its own sake" illustrates a high likelihood of a postconventional outcome which favors the preferred action of giving food on credit to strikers.

---

[1] Heinz and the drug, Webster and hiring, The strike, Doctor's dilemma, Student newspaper, Student takeover, Bingo game, Escaped prisoner.

In this manner, each scenario was the basis for a 2 by 2 by 2 design of high and low likelihood of preconventional, conventional, and postconventional considerations. Eight sets of booklets were arranged by cyclical permutation so that each booklet contained a complete design of the eight combinations of Pr, Co, and Po considerations, one combination to each scenario. Across the eight booklets, each basic scenario was ultimately paired with each rationale possibility. In short, combinations of Pr, Co, or Po likelihoods were balanced across the eight scenarios.

Subjects. Subjects were 128 freshmen in an Illinois high school. Half the Ss were tested immediately after completing a mandatory training course in moral decision making, and half prior to the course. Sexes were equally distributed within the two groups. The course consisted of a one-week series of daily sessions in which decision making in value oriented life situations were discussed with the goal of thinking about the components and processes involved in important decsions. None of the experimental dilemmas were used in the course.

Procedure. Each booklet was evaluated by eight students each from the trained and control groups. Order of scenarios within each booklet was randomized. Students indicated how strongly they felt the character in each dilemma should engage in the alternate target acts on a 20 point scale ("Should not steal the drug (1)....Should steal the drug (20)"). Care was taken to balance scale position of alternative (1 or 20) with affirmative/negative wording, and with normative preference (normatively preferred alternative positioned on the left or the right of the scale). By reversing the score of half the responses, higher scores thus reflected more moralistic preferences.

Results

Figure 1 summarizes the results. Recall that higher scores reflect a rating more toward the moralistic choice. Trained students differed from controls in two ways: They responded more strongly toward the moralistic choice (higher scores in Figure 1), and showed less configuration or relativity in considering rationales (note the lack of graphical interaction in the curves for trained students). Trained students' greater moralism is reflected in the main effect for training [$F(1/112) = 58.12$, $p<.001$]. Considering the groups separately, trained Ss showed no significant interactions between pairs of rationales (note the parallel curves in all three panels), while controls showed all three possible interactions. Finally, there were no differences between the groups in the effect of any of the considerations, that is, interactions of groups with each of Pr, Co, and Po were not present. In short, trained Ss were not more influenced by postconventional rationales, and were not less influenced by conventional or preconventional rationales. But they were less configural in reasoning, and more moralistic in value than the controls.

Proponents of moral education maintain that moral values are not being modified, but that the reasoning process is being changed (Kohlberg & Mayer, 1972; Simon, Howe, & Kirschenbaum, 1972). Here we see the reverse of these claims. Training resulted in no greater use of postconventional principles, nor a lesser reliance on conventional and preconventional. Worse yet, kids who were untouched by training showed the relativism which Piaget attributed to autonomous morality, while trained kids evidenced a more absolutistic

reasoning, appearing to consider the rationales independently. Controls took into account the likelihood of other elements in considering the importance of any one element. For example (left panel) preconventional rationales were unimportant if a conventional outcome is unlikely, but become important (as shown in the relative slopes of the curves) if a conventional outcome is certain.

Training imparted a greater sense of moralism and to add insult to injury led to retrogression in the complexity of integrating decision elements. If the goal of moral education is to mature the reasoning process without directing students toward specific moralistic choices, something went wrong. What went wrong? First, the programs typically make use of morally toned material during discussion. This leads students to discuss moral values in dilemma situations, producing a polarization of students' responses toward the more predominant (morally preferred) direction -- the well demonstrated group polarization effect (Kaplan & Miller, 1983). Second, emphasis is on separating informational elements and considering each singly, rather than on the integration process, leading to a more additive, nonconfigural combination of elements.

Experiment 2 attacked the problem of training reasoning without involving value inculcation by training in configural integration of nonmoral judgment problems. Leaning on Piaget's notion of structural parallelism, it is assumed that change in cognitive structure in one sphere (social judgments) should reflect in changes in another sphere (moral judgments).

EXPERIMENT 2

Method

Overview. Students were given four one-hour sessions of cognitive reasoning training on consecutive days. In each session, a different judgment task was used for illustrating simple and complex integration strategies. The format of each session was the same; students first gave written judgments for the particular task, the "teacher" then described simple means of combining informational elements, which she described as usual in the population, and then guided discussion towards more configural integration strategies. They then responded again to the judgment problem. On the fifth day, students completed the moral reasoning task described in Experiment 1, without class discussion. A control group responded to the judgment tasks and the moral reasoning instrument on the same five days, but without the guided discussion.

Subjects. High school freshmen in two sections of a required speech course comprised the training group (n = 32). Training took place during the class hour. Controls (n = 32) were freshmen in study hall.

Training. In each session, training and control, a different social (nonmoral) task was used. All had been previously employed in the author's research, and each had resulted in nonconfigural averaging of information by college student subjects. In order of usage, these were: (1) Deciding how likely one would be to help a student by serving in an experiment given information about experimenter need and subject cost, (2) Judging guilt of a student accused of cheating based on the student's actions and the severity of penalties, (3) Assigning sentence to a defendant tried for car theft given his

motives and the damage to the car, and (4) Attributing suspiciousness to suspects in fictitious murder mysteries given their motives and opportunities. Students made their judgments, which were collected, and in the training sessions an experimenter, acting as teacher, described how students commonly use a simple integration rule to combine the two elements in the task. She then went on to describe, with examples, more complex integration, guiding the class to discussion of complex possibilities. For example, she led the class to see how, in a murder mystery, one might give less weight to opportunities if motive was weak, and more if motive was strong. And conversely, one might not be as influenced by motive if opportunity was less suspicious than when strong. Each session's discussion of the complex weighting rule built upon discussion of previous sessions. After the class appeared to understand the principle, they retook the task. Responses were in all instances on numerical scales, of the order: "Would definitely not help the experimenter (1)...Would definitely help the experimenter (10)" and "How suspicious is suspect X from 0% to 100% certainty?". On the final day, both groups completed the moral judgment task in a manner similar to that used in Experiment 1.

Results

Training tasks. In the first task - helping - the trained group weighted cost of helping more after discussion than before (Time X Cost interaction $F(1,31) = 4.30$). While there were no differences between the trained and control groups before training discussion, afterwards the former weighed need more than the latter (Group X Need interaction $F(1,62) = 3.97$). So, while training did not affect complexity on the first day's task, it did affect use of need in the judgment. In the second task - cheating - again the two groups did not differ when prediscussion judgments were considered for the trained group. But after discussion, the trained group showed an interaction between severity of potential penalty for the cheater and strength of evidence and the controls did not (Group X Evidence X Penalty interaction $F(2,62) = 4.56$). So, the training was beginning to take effect! The third task required sentencing a defendent for car theft. For trained Ss, the difference in sentencing between mild and severe damages was greater when the defendent did not have serious intentions than when he did, both before and after discussion. This complexity did not show up in controls (Group X Intentions X Damage interaction $F(1,62) = 9.41$) indicating that previous training sessions had been absorbed in Ss' judgments even prior to this session's discussion. In task 4, the murder mysteries, neither group showed configuration prior to discussion. After discussion, trained Ss showrd the expected interaction unlike the controls (Group X Opportunity X Motive interaction $F(4,124) = 4.40$), whereby opportunity mattered more when a strong motive was present than when a weak one was given. All in all then, the trained Ss appeared to have learned their lesson, and demonstrated more complex integration than did controls, who used noninteractive combination throughout.

Moral reasoning. Unlike the case in Experiment 1, there was no tendency for trained Ss to uniformly choose more moral alternatives. This form of training did not lead to changing values toward greater moralism. Recall that in Experiment 1 reasoning became less complex with training. Here, it became more complex. Note in Figure 2, which plots all pairwise comparisons between rationales, significant divergence occurred for controls only in the left panel (Pr/Co Interaction $F(1.31) = 4.68$). That is, the impact of a conventional rationale was greatest when there was a high chance of a preconventional rationale occurring. Otherwise, consideration of conventional

and postconventional rationales, and of preconventional and postconventional rationales was independent. For trained Ss on the other hand, all three panels show statistical and graphical divergence. In all instances, a high likelihood of any one outcome increased usage of other outcome rationales. For example, if there was a high likelihood that peers would support the more moral act (right panel), then likelihood of a principled consequence occurring mattered more. Incidentally, the curves give evidence of differential weighted averaging rather than a multiplicative integration rule since the latter would have led to a downward trend in the lower curves.

There were no group differences in usage or weight of a given type of rationale. This is not surprising since training did not involve moral dilemmas, nor tackle the distinction between principles, social conventions, or personal consequences as bases for decisions.

DISCUSSION

The information integration approach followed here provided a two-sided tool for investigating development of moral decision making. Methodologically it avoided the unclarity associated with retrospective report by asking how Ss integrate available information about a dilemma. It looked at actual use of theoretically meaningful variables rather than relying on potentially misleading introspections.

Conceptually it is a powerful means of separating reasoning from values. In this analysis, we found a harmful and retrogressive effect of standard training procedures (Experiment 1) and showed that reasoning could be modified in a hierarchically advanced direction by cognitive training in nonmoral tasks which avoid inculcating moral values (Experiment 2). Future efforts will focus on training differential usage of general and abstract principles versus personal consequences and social conventions in nonmoral judgmental tasks -- the aspect of reasoning untouched in Experiment 2.

These experiments introduced a standard, systematic procedure for varying critical factors in moral decision making. The modified moral dilemmas constructed here can clearly discern training-induced changes in values and reasoning. The dilemmas should be equally useful in identifying developmental trends in the two components of moral decisions.

REFERENCES

Anderson N. H. (1981). Foundations of information integration theory. New York: Academic Press.

Kaplan, M. F. & Miller, C. E. (1983). Group discussion and judgment. In P. Paulus (Ed.) Basic group processes. New York: Springer Verlag.

Kohlberg, L. (1976). Moral stages and moralization: The cognitive developmental approach. In T. Lickona (Ed.) Moral development and behavior. New York: Holt, Rinehart and Winston.

Kohlberg, L., & Mayer, R. (1972). Development as the aim of education. Harvard Educational Review, 42, 449-496.

Kurtines, W., & Greif, E. G. (1974). The development of moral thought: Review and evaluation of Kohlberg's approach. Psychological Bulletin, 81, 453-470.

Martin, R. M., Shafto, M., & Vandeinse, W. (1977). The reliability, validity, and design of the Defining Issues Test. Developmental Psychology, 13, 460-468.

Nisbett, R. E., & Wilson, T. D. (1977). Telling more than we can know: Verbal reports on mental processes. Psychological Review, 84, 231-259.

Piaget, J. (1965). The moral judgment of the child. New York: The Free Press.

Rest, J. R. (1975). Longitudinal study of the Defining Issues Test of moral judgment: A strategy for analyzing developmental change. Developmental Psychology, 11, 738-748.

Simon, S. B., Howe, L. W., & Kirschenbaum, H. (1972). Values clarification. New York: Hart Publishing Co., Inc.

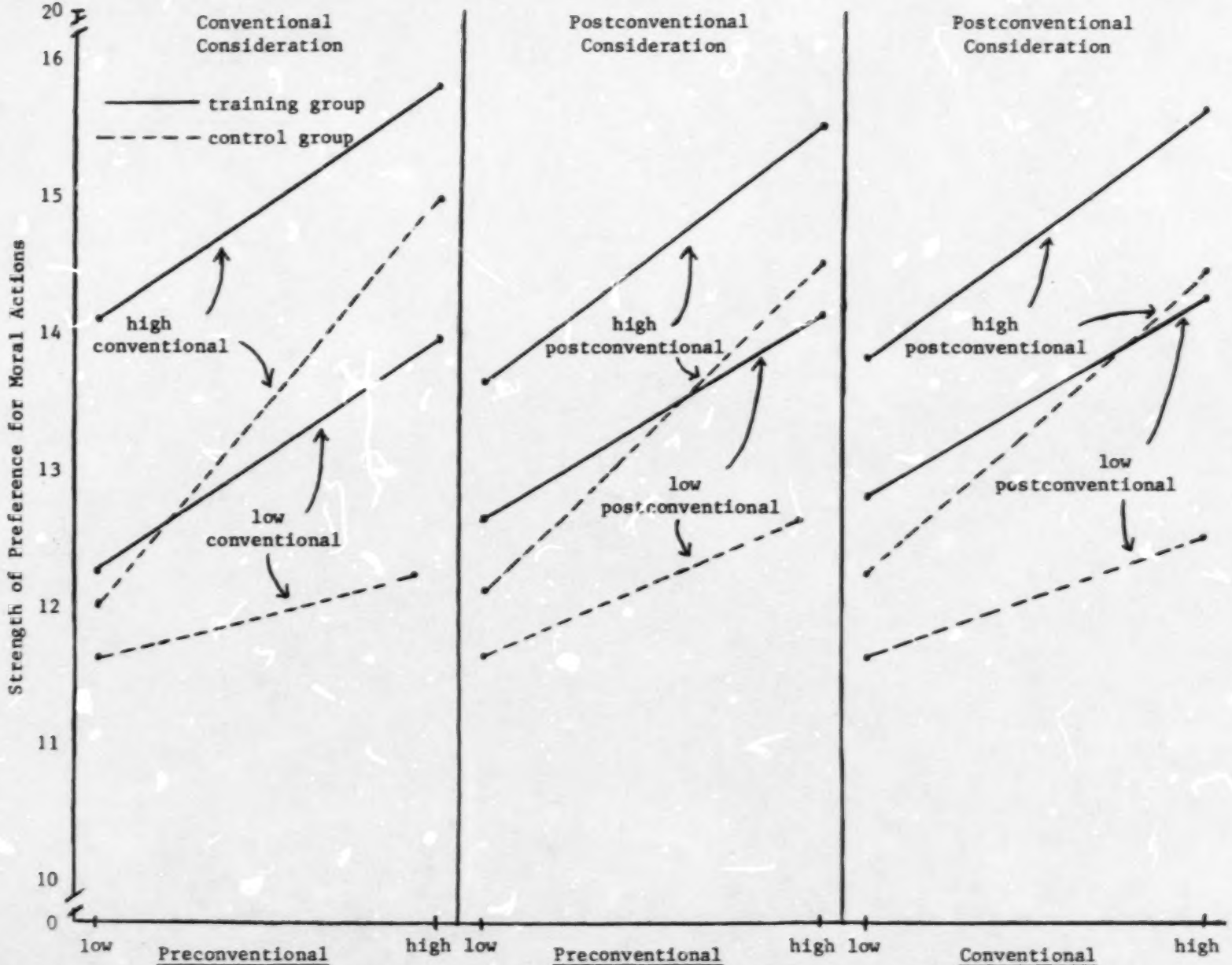

Figure 1. Morality choice as a function of high or low likelihood of preconventional, conventional, and postconventional considerations: Plot by pairs of considerations. (Higher scores = greater moralism)

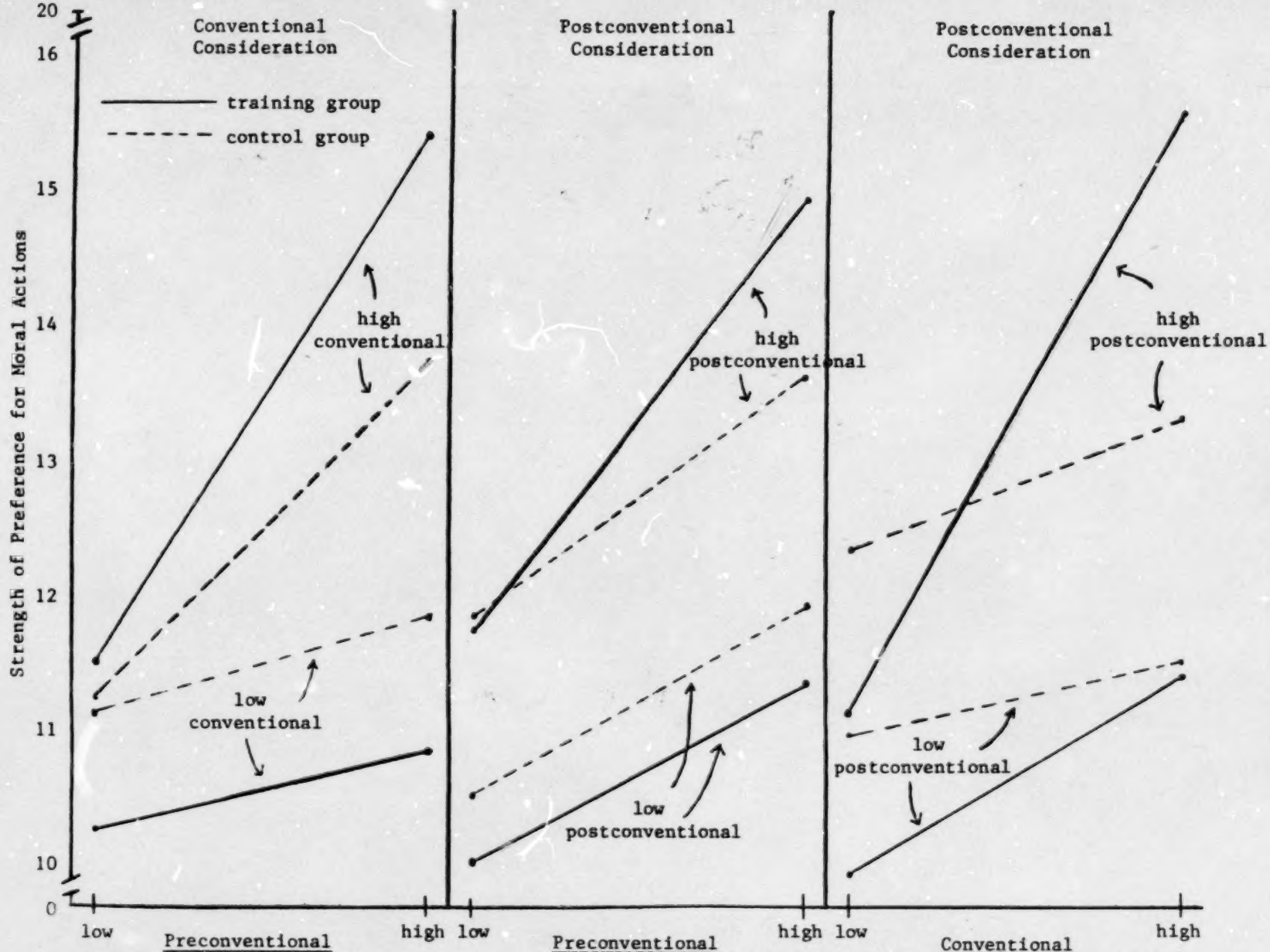

Figure 2. Morality choice as a function of high or low likelihood of preconventional, conventional, and postconventional considerations: Plot by pairs of considerations. (Experiment 2)